# Kansas Health Statistics Report

Kansas Department of Health and Environment - Center for Health and Environmental Statistics - No 23 - November 2004

# **Annual Summary Reports Decreased Teen Pregnancy Rates**

Kansas teenagers were less likely to become pregnant in 2003 than at any time during the last decade, according to the 2003 *Kansas Annual Summary of Vital Statistics* published by the Center for Health and Environmental Statistics.

Teen pregnancies are defined as the sum of live births, still-

Table 1. Selected Vital Event Rates and Ratios, Kansas, 2002-2003

Vital Event	2002	2003
Live Births	2002	2003
Number	20 220	20.252
_	39,338 14.5	39,353 14.4
Rate	14.5	14.4
Out-of-Wedlock Births	40.400	40045
Number	12,129	12,345
Ratio	30.8	31.4
Stillbirths (S.B.)		
Number	146	206
Rate	3.7	5.2
Hebdomadal Deaths		
(Under 7 days)		
Number	155	138
Rate	3.9	3.5
Perinatal Period III Deaths		
(S.B. & Hebdomadal)		
Number	301	344
Rate	7.6	8.7
Neonatal Deaths		
Number	192	177
Rate	4.9	4.5
Infant Deaths		
Number	282	262
Rate	7.2	6.7
Maternal Deaths		
Number	2	0
Rate	0.5	0.0
Deaths		
Number	24,968	24,417
Rate	9.2	9.0
Marriages		
Number	19,783	18,722
Rate	7.3	6.9
Marriage Dissolutions		
Number	9,654	8,644
Rate	3.6	3.2
Abortions		
Total Reported	11,844	11,697
Kansas Residents.	6,298	6,163
Out of State Residents	5,546	5,534

Residence data presented for births and deaths. Occurrence data presented for marriages, and marriage dissolutions f live births, stillbirths, and abortions. There were 3,542 pregnancies among Kansas teen residents in 2003.

The pregnancy rate for females ages 10-19 decreased 24.1 percent from 34.8 pregnancies per 1,000 female age-group population in 1994 to 26.4 in 2003. Teen pregnancy rates for females ages 10-17 decreased 34.0 percent during the same time period. Pregnancy rates for 10-19 year old black mothers fell more steeply (down 42.5 percent) from 1994-2003 than rates for other population groups.

Information on teenage pregnancies is just part of the wealth of information provided in the Kansas Annual Summary of Vital Statistics. The Center prepares the summary as part of Kansas

Department of Health and Environment's fundamental responsibility for assessing the health of Kansas residents.

The data compiled are used by program managers and policy makers at state and local levels to address health concerns. Analysis of trend data, county data, and a comparison of Kansas to the nation are included in this report.

Some of the highlights from the report include:

 The Kansas infant mortality rate, the ratio of infant deaths to live births, tied with the 2000 rate for the lowest ever

- recorded. There were 39,353 live births and 262 infant deaths to Kansas residents in 2003. This resulted in an infant mortality rate of 6.7 deaths per 1,000 live births and was a decrease of 6.9 percent from the infant mortality rate of 7.2 in 2002 (Table 1).
- The out-of-wedlock birth ratio has continued an upward trend over the years in both Kansas and the U.S. Out-ofwedlock births comprised 31.4 percent of all live births that occurred to Kansas residents in 2003, a 21.2 percent increase from 25.9 percent of live births in 1994.
- The abortion ratio for Kansas residents in 2003 was 156.6 per 1,000 live births, a decrease of 11.5 percent from the 177.0 ratio in 1994. Ratios increased from 1991 to a high of 186.3 in 1996, and then generally declined for the next seven years.
- For the first time since deaths were collected (1911), there were no maternal deaths to Kansas residents in 2003.
- The average age at death of Kansas residents in 2003 was 74.5 years. The average age at death for males was 70.4 years, for females 78.2. The average age at death for blacks was 64.0 years compared to 75.2 for whites.
- Unintentional injury and violent death accounted for nearly 50 (47.9) percent of deaths for those 1-44 years of age.
- The age-adjusted death rate for the leading cause of death, heart disease, was 210.3, and for cancer, the second leading cause of death, the age-adjusted death rate was 184.5 per 100,000 standard U.S. 2000 population. Together, these two causes accounted for almost 50 percent of all Kansas resident deaths.
- Couples in Kansas had fewer marriages in 2003, continuing a general downward trend that began in 1993. In 2003, 18,722 marriages occurred in Kansas, a decrease of 5.4 percent from the 2002 total of 19,783. The marriage rate (6.9 per 1,000 population) decreased 17.9 percent from the 1994 rate of 8.4. The number of marriage dissolutions (divorces and annulments) also continued a downward trend that began in the early 1990s.

The 2003 *Annual Summary* is available in a PDF format at <a href="http://www.kdhe.state.ks.us/hci/annsumm.html">http://www.kdhe.state.ks.us/hci/annsumm.html</a>

Karen Sommer, MA Vital Statistics Data Analysis

### Smoking during Pregnancy

Cigarette smoking during pregnancy adversely affects the health of both mother and child. In a CDC comparison of 49 states, Kansas was one of several states showing an increase in maternal smoking percentages for teen mothers from 1990-1991 to 2001-2002.

In 2002 smoking during pregnancy was re-

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ported by 11.4 percent of all women giving birth in the United States. That represented a decrease of 38 percent from 1990, when 18.4 percent reported smoking. The percentage change for Kansas births was 11.2 percent (Table 2).

Table 2. Percentage of mothers who smoked during pregnancy, 1990, 1996 and 2002

programa, i	1990 %	1996 %	2002	% change 1990-2002
Kansas	14.3	12.9	12.7	-11.2
U.S. (1)	18.4	13.6	11.4	-38.0

(1) National totals may exclude certain states that did not collect maternal smoking data during the time period Source: Centers for Disease Control and Prevention

The percentage of females aged 15-19 years who smoked during pregnancy in Kansas rose a statistically significant seven percent between 1990-1991 to 2001-2002. For the latter time period, almost one in five teen mothers in Kansas reported smoking during pregnancy (Table 3)

Table 3. Percentage of females aged 15-19 years who smoked during pregnancy

	1990-	1995-	2001-	% Change
	1991	1996	2002	1990-1991 to
	%	%	%	2001-2002
Kansas	17.9	18.4	19.2	7
U.S.(1)	20.3	17.0	17.1	-16

(1) National totals may exclude certain states that did not collect maternal smoking data during the time period Source: Centers for Disease Control and Prevention

The CDC findings have two limitations 1) data on maternal smoking were not available from several states, including California, where 13.2 percent of the U.S. births occurred in 2002; and 2) prenatal smoking is underreported on birth certificates

Morbidity and Mortality Weekly Report Centers for Disease Control and Prevention

### **Influenza Mortality Trends Studied**

Pneumonia and influenza (P&I) related mortality is as common as sub-freezing temperatures during winter in Kansas. The official influenza or flu season runs from September through May.

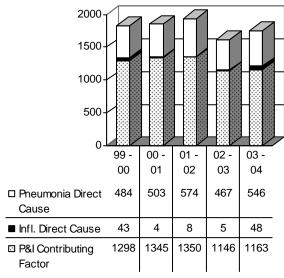
P&I deaths peak during January and February, the coldest months. While there is a lot attention given to pneumonia and influenza deaths, the actual number of Kansas resident deaths directly attributable to pneumonia or influenza is less than one third the total deaths (29.9%).

During the last five flu seasons, a total of 8,984 P&I-related deaths were reported (Figure 1). Only 108 deaths (1.2%) were directly attributable to influenza. Pneumonia was the direct cause of death for 2,574 individuals.

The actual total of deaths directly attributable to influenza may be higher, but in the absence of confirming lab tests, physicians completing the death certificate may only indicate that influenza or pneumonia was a factor in the death. In those deaths other illnesses or causes were a greater factor or cause.

The challenge of arriving at a definitive cause of death in these respiratory deaths is one of the reasons that published P&I reports include all related deaths. The number of P&I deaths is a barometer, serving as a proxy of how much flu activity is occur-

Figure 1. Pneumonia & Influenza Deaths by Season and Type of Cause



ring in a community or state. Public health epidemiologists, who also survey physicians' offices and monitor lab test results, closely watch mortality numbers.

During the five most recent flu seasons the number of P&I related deaths has gone down slightly, 10.5 percent from the 1999-2000 season to 2003-2004 (Figure 1).

There is hidden good news in the mortality statistics. Since pneumonia and influenza were only factors in many of the P&I-related deaths, it means that if individuals take preventive steps to stay healthier and keep well during the flu season, they will be less likely to suffer life-threatening complications from influenza.

This is why it's so important to vaccinate the high risk population in Kansas. Many of those individuals have underlying health conditions that when combined with pneumonia and influenza make recovery difficult.

Information on how to stay healthier this flu season can be obtained from the Centers for Disease Control and Prevention at:

- http://www.cdc.gov/flu/protect/preventing.htm
- http://www.cdc.gov/flu/protect/covercough.htm
- http://www.cdc.gov/germstopper/

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# Kansas Whooping Cough Cases Increase in 2004

The Kansas Department of Health and Environment (KDHE) reported an increasing number of confirmed pertussis (Whooping Cough) cases in the state earlier this year. From May though September there were 31 confirmed cases of pertussis reported to KDHE, compared to an average of nine cases in the previous three years for the same months.

The Kansas counties with confirmed and probable cases during May to September include Douglas, Franklin, Johnson, Leavenworth, Lincoln, Miami, Saline, Sedgwick, Shawnee, and Wyandotte. An increase in the number of cases has also been reported in some other Midwestern states.

Pertussis, a highly contagious respiratory infection commonly referred to as Whooping Cough, is a potentially fatal childhood disease that is preventable with vaccination. The disease is named after the "whoop" sound children and adults often make when they try to inhale during or after a severe coughing spell.

People can get infected with pertussis by inhaling contaminated droplets from an infected person's cough or sneeze. A person with pertussis becomes contagious in the early stages of infection. During this period, the person usually just has a runny nose. They are still quite contagious the first 2 weeks after onset of the cough (approximately 21 days total).

According to the Centers for Disease Control and Prevention (CDC), mild cases of pertussis are difficult to diagnose because they resemble a cold. However, mild cases can be passed on to young children and can produce severe illness in the child. The CDC urges individuals who suspect they have pertussis to limit contact with unvaccinated children and see a physician as soon as possible.

Symptoms of pertussis are similar to those of as a cold or flu including a runny nose, sneezing, fever, and a mild cough. Symptoms can last up to two weeks and are followed by increasingly severe coughing spells. Fever, if present, is usually mild. Symptoms appear between six to 21 days (average 7-10) after exposure to the bacteria.

During a classic coughing episode, the signature "Whoop" is heard when the patient struggles to breath. Cough usually produces a thick mucus. Vomiting may occur after a coughing episode and the lips and nails may turn blue due to lack of oxygen. The patient is left exhausted after the coughing spell.

If you or a member of your family is exhibiting symptoms, including cough for two weeks or longer, without other explanation, please contact your physician. There are medications to treat the infection and relieve the symptoms.

The single most effective control measure is immunization of the most vulnerable population against pertussis. Immunization is recommended at 2, 4, 6, and 12 months of age with a booster at kindergarten entry.

Young infants are at highest risk for pertussis-related complications, including seizures, encephalitis (swelling of the brain), severe ear infection, anorexia (severe loss of appetite) and dehydration. Pneumonia is the most common complication and cause of infantile pertussis-related deaths.

According to the Centers for Disease Control and Prevention, <a href="http://www.cdc.gov/nip/publications/pink/pert.pdf">http://www.cdc.gov/nip/publications/pink/pert.pdf</a>, pertussis was responsible for approximately 280,000 deaths worldwide in 2001. Due to vaccination, the number of cases in the United States decreased by 98 percent in the mid-20th century from approximately 200,000 to 4,200.

KDHE Bureau of Epidemiology and Disease Prevention

#### **Child Death Review Board Report**

The 2002 Report of the State Child Death Review Board (SCDRB) summarizes the investigation of 498 children who died that year. The board's report, while noting the number of deaths was slightly down from previous years, says trends that have been noted since reviews began in 1994 remained consistent.

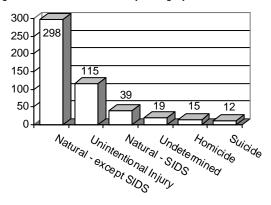
The board reported homicides and suicides among children were down slightly from 2001. The suicide level was at its lowest in nine years. Homicides classified as child abuse, however, rose from five to seven.

Unintentional injury deaths represented 23 percent of the deaths in 2002 (Figure 2). Sixty-nine percent of those were vehicular. Children, aged 15-17, have the most motor vehicle deaths, 52 percent of the vehicular total.

The largest category of deaths is natural deaths, representing 60 percent of the total. Children under one year made up over three-fourths of the deaths (76%).

Cases reviewed by the SCDRB begin with the KDHE Office of Vital Statistics providing a death certificate. The board then ob-

Figure 2. 2002 Child Deaths by Category



tains police reports and other records to perform a complete investigation into all of the circumstances surrounding the death. The board's findings and recommendations to prevent child deaths are contained in a report available at <a href="http://www.ksag.org/Divisions/SCDRB/cdrb.htm">http://www.ksag.org/Divisions/SCDRB/cdrb.htm</a>.

2002 Annual Report State Child Death Review Board

#### **Kansas Trauma Registry Progress**

In calendar year 2003, 58 of 123 Kansas hospitals reported over 6,700 patient injury cases to the Kansas Trauma Registry. The Kansas Trauma Registry collects data for severely injured or transferred patients as required by state law. Starting in October, it is expected that data be reported on children who have been injured and admitted to a Kansas hospital regardless of their length of hospital stay. This is a change from adults, who only have data reported after they've been admitted to a hospital for 48 hours or more. Those patients who have minor injuries treated and are released are not reported to the State Registry.

The first two quarters of 2004 are off to a good start. Already 76 hospitals have reported over 3,900 injury cases to the state registry. Increased participation has been aided by more training available for hospital staff that manages the registries. The Kansas Department of Health and Environment houses the Kansas Trauma Registry and provides training, support and registry software to hospitals free of charge.

KDHE has also been reviewing all aspects of data completeness and data quality. Hospitals are required to report data on a quarterly basis. KDHE has developed a process by which the data is reviewed soon after it has been received. Hospitals should expect to receive a report on the completeness of their data within a week or two of when they submit it. Further improvements in the software will be made in the coming year as well as efforts to validate the data. A limited amount of information from the registry is currently being provided to each of the respective six regional trauma councils.

Analysis on future datasets will be possible due to the anticipated increase in number of Kansas hospitals reporting trauma cases to the Kansas Trauma Registry as well as an expected increase in data quality for completeness and accuracy

> Susan Quinn Vital Statistics Data Analysis

#### **News Notes**

#### Health Care Access among Hispanic/Latino Children

Having access to high-quality health care is one of the most important determinants of the well-being of America's children. Although much effort has been made to eliminate inequality in

health and health care, disparities in access to care have continued to exist.

A recent National Center for Health Statistics (NCHS) report "Access to Health Care Among Hispanic/Latino Children: United States, 1998-2001" estimated that each year three million (25.7%) Hispanic/Latino children lacked health insurance coverage. At the time of a National Health Interview Survey, 1.6 million had no usual place to go for health care during the past year, and 1.4 million experienced unmet health care needs during the past year due to cost. Of the five Hispanic/Latino subgroups Mexican children were most likely to lack health insurance coverage.

NCHS combined surveys from 1998-2001 assessing health information about 14,284 Hispanic/Latino children under the age of 18 years. The findings are part of the *Advance Data from Vital and Health Statistics* series Number 344, June 24, 2004.

National Center for Health Statistics

#### Trends in Health Insurance Coverage

Overall health insurance rates changed little among nonelderly black, Latino, and white Americans between 2001-2003, according to new findings from the Center for Studying Health Systems Change (HSC). But sources of coverage shifted — especially for Latinos — from employment-based insurance to public coverage, suggesting the economic downturn took a greater toll on Latinos. Low-income Latinos and whites were particularly hard hit by declines in employer coverage. Shifting sources of coverage had little effect on access to medical care.

With the sole exception of decreased access to specialists among blacks, access to care did not change between 2001-2003. Significant gaps in access to care among Latinos, blacks and whites persisted, with Latinos and blacks consistently reporting lower levels of access than whites.

Tracking Report Center for Studying Health System Change

#### Census Bureau Publishes Bridged Race Data

The National Center for Health Statistics annually releases bridged-race population estimates of the resident population of the United States, based on Census 2000 counts, for use in calculating vital statistics rates. These estimates result from bridging the 31 race categories used in Census 2000, as specified in the 1997 Office of Management and Budget (OMB) standards for the collection of data on race and ethnicity, to the four race categories specified under the 1977 standards.

Many data systems, such as vital statistics, are continuing to use the 1977 OMB standards during transition to the new standards. The U. S. Census Bureau produces the bridged-race population estimates under a collaborative arrangement. The bridged race data and information on bridging methodology are available for download from <a href="http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm">http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm</a>.

Although efforts were made to use the best available data and methods to produce the bridged estimates, the modeling process introduces error into the estimates. The potential for error will be greatest for the smallest population groups, particularly the smaller race groups and county level estimates.

National Center for Health Statistics

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